Frequently Asked Questions (FAQs) for R&I Challenge Call for Decarbonisation

As of 29 July 2024

Q1: Can I submit more than one proposal for each challenge statement?

A1: Yes, you may submit multiple proposals, but each proposal must be different.

Q2: Can my company engage our preferred building owners for the testbedding phase?

A2: Yes, you may approach building owners of your preference, preferably those with high energy consumption building typologies such as commercial offices, retail spaces, and hotels. BCA would evaluate the suitability of other building typologies such as healthcare facilities, institutions on case-by-case basis. We encourage applicants to reach out to BCA for clarifications if needed.

Q3: How will I know if my application is shortlisted?

A3: We aim to inform shortlisted participants via email in October or November 2024 with instructions on the next steps. However, the timeline may be subject to changes depending on prevailing circumstances.

Q4: What are your policies on intellectual property ("IP") protection and confidentiality obligations?

A4: The participant is solely responsible for protecting their IP rights in their submission. Once an application is submitted and selected for trial with the project collaborator(s), the protection of IP rights in the submission shall be privately agreed upon between the collaborator(s) and the participant. We encourage participants to enter into agreements with the collaborator(s) on ownership, licensing, and exploitation of foreground IP to encourage commercialisation and market adoption.

Q5: What is the funding support for private sector entities?

A5: Private sector entities are eligible for tiered funding support levels (up to 30% for all non-Singapore entities; 50% for Singapore Large Local Enterprises (LLEs); 70% for Singapore Small and Medium-sized Enterprises (SMEs), start-ups, and not-for-profits).

Q6: May I request an extension of time to submit my proposal?

A6: We encourage you to submit your proposal endorsed by your organisation by the given deadline. We will not be able to grant any extension of time for late submissions.

Q7: Does my company need to collaborate with IHL/RI as part of the project team members?

A7: Funding for private sector entities for R&D projects (total project budget >\$0.5M) and Product Prototyping projects (total project budget >\$2M) would be conditional on collaboration with a public research performer.

Q8: Do I need to attend the briefing to be eligible to participate in the Challenge Call?

A8: No, applicants could still be eligible to participate in the Challenge Call. For interested applicants who had missed the industry briefing, you may refer to the industry briefing slides on <u>SLEB Smart Hub</u> and submit your application via IGMS by 13 Sep 2024.

Q9: My company is a foreign MNC firm based in Singapore. Can we involve our global R&I partners/colleagues who are based overseas to be project team members?

A9: Yes, overseas expert involvement is allowed as long as it contributes to the project's goals. However, funding awarded cannot be used to support overseas R&I activities and testbedding activities outside of Singapore unless approved in the grant.

Q10: I am a global technology firm without any presence in Singapore. Am I allowed to participate in the Challenge Call?

A10: We advise you to partner with a Singapore solution providers or IHL/RI if you are interested in participating in the Challenge Call.

Q11: Can we involve a co-PI from overseas and what is the funding policy for that?

A11: Involvement of overseas experts for the project is encouraged if they can value add to the goals of the research projects. Funding support would typically cover their costs of carrying out R&I activities in Singapore. Funding awarded cannot be used to support overseas R&I activities outside of Singapore unless approved in the grant. For more information on fundable and non-fundable items, please refer to the **Guidelines for the Management of Research Grants** document available on <u>SLEB Smart Hub</u> and the <u>Integrated Grants Management System (IGMS)</u>.

Q12: Can the funding be provided to the solution provider or to the building owner who will be procuring the solution?

A12: Funding will be provided to eligible PI, co-PI of the project team. PI, co-PI should provide the project budgets needed for the project such as manpower, equipment, material, testing services etc and seek the funding support. For more information on fundable and nonfundable items, please refer to the **Guidelines for the Management of Research Grants** document available on <u>SLEB Smart Hub</u> and the <u>Integrated Grants Management System (IGMS)</u>.

Q13: Is engaging testing services for testbedding phase supportable?

A13: Engaging testing services for measurement and verification (M&V) of the performance of the solutions are generally supportable. For more information on fundable and non-fundable items, please refer to the **Guidelines for the Management of Research Grants** document available on <u>SLEB Smart Hub</u> and the <u>Integrated Grants Management System (IGMS)</u>.

Q14: Is there a maximum and minimum numbers of the PI and co-PI in a proposal?

A14: Minimally, a proposal should comprise at least one lead PI. The number of co-PIs that are needed would depend on whether the proposal's scope covers multi-disciplines and with several deliverables.

Q15: What will be the levels of support for project comprises multiple firms/IHLs/RIs?

Q15: The funding level will be pegged to the entity classification of the participating organisations in the project. For example, qualified cost items from SME firm will be supported up to 70%; qualified cost items from LLE firm will be supported up to 50%; qualified cost items from non-Singapore firm will be supported up to 30% and qualified cost items from local IHL/RI will be supported up to 100%.

Q16: If the building where we would like to testbed our solution has already been certified as GM Platinum, does this mean that our solution needs to achieve 30% better than our existing performance?

A16: The target set for R&D or Product Prototyping proposal refers to the equipment/ system energy efficient target, not for the target for entire building EUI. For example, if the solution is to improve chiller plant system energy efficiency, the target is to be 25% or 30% better than GM2021 Platinum standard for chiller plant efficiency which is 0.56 kW/RT or current best-inclass chiller plant performance, whichever is better. Please see below Table 2 at page 9 of the Challenge Call document.

The applicant could address one or more of the areas mentioned in Table 2.

Table 2: R&I Challenge Call Targets

| | GM 2021 | Product | R&D Target |
|--------------------------|----------|----------------------|-------------------------|
| | Platinum | Prototyping Target | (30% better the GM |
| | Standard | (25% better the GM | Platinum standard or |
| | | Platinum standard | existing best-in-class |
| | | or existing best-in- | solutions, whichever is |
| | | class solutions, | better) |
| | | whichever is | |
| | | better) | |
| Chiller plant system | 0.56 | 0.420 | 0.392 |
| efficiency (kW/RT) | | | |
| Air side efficiency | 0.18 | 0.135 | 0.126 |
| (kW/RT) | | | |
| Total AC system | 0.74 | 0.555 | 0.518 |
| efficiency (including | | | |
| water side and air side) | | | |
| (kW/RT) | | | |
| Lighting (W/m²) | | | |
| - Office/Meeting | 5.5 | 4.125 | 3.85 |
| Room | 7.0 | 5.250 | 4.90 |
| - Hotel Guest Room | | | |
| Mechanical Ventilation | | | |
| (W/CMH) | 0.28 | 0.210 | 0.196 |
| > 4kW | 0.17 | 0.128 | 0.119 |
| < 4kW | | | |
| Reduced Heat Gain (ETTV) | | | |
| (W/m²) | 38 | 28.5 | 26.6 |
| - Office Building | 40 | 30.0 | 28.0 |
| - Hotel | | | |

Q17: Is there a timeframe in which the research needs to be conducted and what is the duration needed for testbedding M&V phase?

A17: Project should be ready to commence as soon as possible after the project is awarded. Project team could write in to BCA if more time is needed to kick start the project. As for the testbedding duration, it would depend on the extent of the testbedding that is being proposed in the proposal. Typically, it would be around 3 – 6 months.

Q18: What is the definition of "best-in-class solutions" for each of the different systems?

A18: GM2021 Platinum standard in Table 2 are used as proxy for best-in-class performance. However, if there is better performance solution available in the market than what were stated in Table 2, we would use the better performance target for the proposal. We trust the solution providers will have a deeper understanding of what is available in the existing market and to conduct a tech scan of the performance of similar products.